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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,325	07/18/2003	Leif Johannsen	45900-000761/US	2522
30593	7590	04/26/2006	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			GESESSE, TILAHUN	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/621,325	Applicant(s) JOHANNSEN ET AL.	
	Examiner Tilahun B. Gesesse	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/23/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Priority

2. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119(e), a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage

commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference

in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 3,24,30,45, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In these claims the limitation following the phrase "such as" a LCOS display , it is unclear a LCOS display, is part of the claim invention. Such a phrase includes other element in the list not necessarily the claim element.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-9,15-30,36-47,52-59,64-66 are rejected under 35 U.S.C. 102(a) as being anticipated by Mori (US 2002/0065113).

Claims 1,22-23,43,55-56 Mori teaches a mobile handset (see fig.4) comprising –

-Mori teaches a handset housing comprising a front and a back cover, (front cover 206, and back layer of plastic type cover, 221, see fig.1 6 and pg. 2,para. 0034-0035)

- Mori teaches - display means being visible from the front cover side of the handset housing, the display means being adapted to provide visual information to a user of the mobile handset, [see fig.4 pg. 2, para 0034] and

-Mori teaches a plurality of Loudspeakers being adapted to generate audio signals [see page 2,para 0034]

-Mori teaches each of the plurality of loudspeakers comprises a magnetic circuit comprising a magnet, the magnetic circuit having at least one gap defined between two opposed and substantially parallel surfaces of the magnetic circuit, the magnet of the magnetic circuit causes a magnetic field to exist across the at least one gap, wherein the magnetic circuit defines magnetic return paths completely encircling the gap [see pg 2 para 0038-pg. 3 para 0045 and figs. 8-9).

Claim 2,44 Mori teaches image compensation means so as to allow the mobile handset to be applied in near-to-the-eye applications [see fig.4), in which speaker and display positioned in the platform).

Claims 3, 24,45,57 Mori teaches the display means is a colour display, such as a LCOS display (see fig.5 and its disclosure]

Claims 4 and 6,25-27 Mori teaches the plurality of loudspeakers are arranged within the handset housing so that the audio signals are transmitted from the front cover of the handset housing [see fig. 4].

Claim 5, Mori teaches the plurality of loudspeakers comprise loudspeaker front covers each having at least one acoustic opening arranged so that the audio signals are transmitted primarily in a direction being perpendicular to a mean plane defined by the loudspeaker front cover (see page 2 para 0034-page 3 para 0045).

Claims 7,28 Mori teaches. the plurality of loudspeakers comprise loudspeaker front covers each having at least one acoustic opening arranged so that the audio signals are transmitted primarily in a direction being parallel to a mean plane defined by the loudspeaker front cover[see pg. 2 para 0034-page 3 para 0045).

Claims 8,29,46-47,58-59. Mori teaches two loudspeakers are arranged at two opposing sides of the display means [see fig. 8 231 and 232 are considered two opposite sides].

Claims 9,30. Mori teaches a third speaker is positioned between the two oppositely arranged loudspeakers and at a third side of the display means (see figure 6).

Claims 15,36, Mori teaches vibration means so as to mechanically vibrate the mobile handset in accordance with a vibration signal provided to the vibration means (abstract).

Claim 16-17,37-39,52,64, Mori teaches a number of drivers for driving the loudspeaker (see pg. 2, para. 0034-pg. 3 para. 0045)).

Claims 18, 53-54,65-66 an electronic decoding circuit for decoding a received digital signal into two or more driver signals, each driver signal being provided to a loudspeaker via at least one driver (see abstract).

Claims 19, 40, Mori teaches means for enhancing the stereo reproduction (see abstract).

Claim 20,41, Mori intently teaches the means for enhancing the stereo reproduction comprises cross talk cancellation.

Claim 21,42 the mobile handset is a mobile phone, [see fig.4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10,31,48,60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of Saiki et al (US 2003/0003945A1).

Claim 10, 31, 48 and 60 . Mori does not teach each of the plurality of loudspeakers comprises a number of loudspeaker units, each loudspeaker unit comprising at least one movable diaphragm. However, Saiki teaches each of the

plurality of loudspeakers comprises a number of loudspeaker units, each loudspeaker unit comprising at least one movable diaphragm (abstract). Mori and Saiki teach speaker using technique of magnet, then , it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to use diaphragm in Mori system , as taught by Saiki , in order to reproduce sound of the caller to the called subscriber.

Claims 11-14,32-35,49-51,61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of Smethers (US 6,463,304).

Claim 11-14, 32-35, 49-51,61-63, Mori does not expressly teach means for controlling a pointer shown on the display means and the control means comprises a navigation key accessible from the back cover side of the handset housing, the navigation key being capable of providing two-dimensional control of the pointer shown on the display means and the navigation key is capable of selecting information displayed on the display means upon moving the navigation key from an initial position to a select position.

However , Smethers teaches means for controlling a pointer shown on the display means and the control means comprises a navigation key accessible from the back cover side of the handset housing, the navigation key being capable of providing two-dimensional control of the pointer shown on the display means and the navigation key is capable of selecting information displayed on the display means upon moving the navigation key from an initial position to a select position (column 3, lines 60-68 and

column 4, lines 19-42 and figure 1). Mori and Smethers teach similar area of endeavor, then, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made utilize a pointer or navigating key in the Mori system, as taught by Smethers, in order to easily access the keys at the soft navigating key on the display rather than another step attempting to manipulate cumbersome dialing keys.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899.

The Central FAX Number is 571-273-8300. For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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4/18/06
Tilahun Geesese
**TILAHUN GEESSE
PRIMARY EXAMINER**